

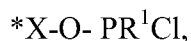
## REMARKS

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Thus, claim 38 has been amended to more particularly define the reagent used to form the intermediate compound, and the reagent to be reacted with the intermediate compound. More specifically, step b of claim 38 recites that the ortho-lithiated substrate is reacted with a dichlorophosphine of the formula  $R^1PCl_2$  to form the intermediate compound, and then step c recites that the intermediate compound is reacted with an organometallic reagent of the formula  $R^{1''}Z$  to form the compound having a phosphine group. Support for these amendments is found in paragraph [0051] of the published version (US 2008/0281106) of the present application.

The Examiner has maintained the rejection of claims 38-44 under 35 U.S.C. § 103(a) as being unpatentable over Hayashi et al. in view of Nettekoven et al. and Berlin et al., specifically referring to the reactions in scheme (2) and scheme (8) of the Hayashi et al. reference.

However, in the first place, Applicants note that Hayashi et al. do not teach reacting a lithiated compound with a dichlorophosphine, as recited in amended claim 38 above. Moreover, this reference is silent on reacting Applicants' formed intermediate compound, which seems to have the structure



with a further organometallic reagent having the formula  $R^{1''}Z$ , as recited in claim 38.

Although, the specific structure of the intermediate compound is not disclosed in the present application, it is likely that the structure is as described above. However, -X\* and -PR<sup>1</sup>Cl are in ortho-position.

Berlin et al. are silent on reacting a lithiated compound with a dichlorophosphine and subsequently with a further organometallic compound. Thus, the specific reaction sequence claimed is not suggested by the prior art.

The technical problem underlying the present invention was the provision of a process for the production of asymmetric transformation catalysts, in particular to such a process for the production of phosphine ligands having a chiral center at the phosphorus atom.

The examples of the present application clearly prove that the claimed process solves the technical problem underlying the present invention. Moreover, the prior art does not disclose or suggest first reacting the ortho-lithiated substrate with a specific dichlorophosphine, and

subsequently with a further specific organometallic compound.

For these reasons, Applicants take the position that the presently claimed invention is clearly patentable over the applied references.

Therefore, in view of the foregoing amendments and remarks, it is submitted that the present application is now in condition for allowance. Such allowance is solicited.

Respectfully submitted,

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December 22, 2010